

What is claimed is:

1. In a computer-operated system for programming a manufacturing system, wherein a version of a program is downloaded to the manufacturing system and is associated with a version designator, a method for managing revisions to versions of the program, the method comprising the steps of:

running the program on the manufacturing system; and

10 if the program, when run on the manufacturing system, performs according to a preselected criterion, revising the version designator for the program.

2. The method according to claim 1, wherein the version designator comprises a version label, version identifier, and a status identifier.

15 3. The method according to claim 2, wherein the version identifier comprises a top-level version identifier and a lower-level version identifier.

4. The method according to claim 1, wherein the version identifier

20 comprises a number and the step of designating a revised version designator for the program comprises the step of incrementing the version identifier.

5. The method according to claim 2, wherein the status identifier comprises a validation indicator.

6. The method according to claim 5, wherein the manufacturing system comprises at least one line, the preselected criterion comprises a check whether the program runs satisfactorily on the line, and wherein the step of designating a revised status identifier for the program comprises activating the validation indicator.

10 7. The method according to claim 6, wherein the validation indicator is checked as a condition to running the program on the line without manual intervention.

15 8. The method according to claim 2, wherein the status identifier comprises a release indicator.

9. The method according to claim 8, wherein the manufacturing system comprises a plurality of lines, the preselected criterion comprises a determination that the program runs satisfactorily on the lines, and the release indicator identifies the program as released for use on the plurality of lines.

20 10. The method according to claim 8, wherein the release indicator is checked as a condition to running the program on any lines of the manufacturing system without manual intervention.

11. The method according to claim 1, wherein the manufacturing system comprises an electronics assembly system.

5 **12.** A computer data structure for use in identifying programs for computer-controlled manufacturing systems, wherein the programs comprise subsets organized with respect to one another in a hierarchical fashion, the subsets comprising a top-level subset and a plurality of lower-level subsets related hierarchically to the top-level subsets and to each other, the data
10 structure comprising:

a first portion for indicating a revision to the top-level subset of a program; and

15 a second portion for indicating a revision to any of the lower-level subsets of the program.

13. The computer data structure according to claim 12, wherein either of the first and second portions comprise a numeral that is incremented to identify the revision.

20 **14.** The computer data structure according to claim 12, wherein the first and second portions are positioned adjacent one another.